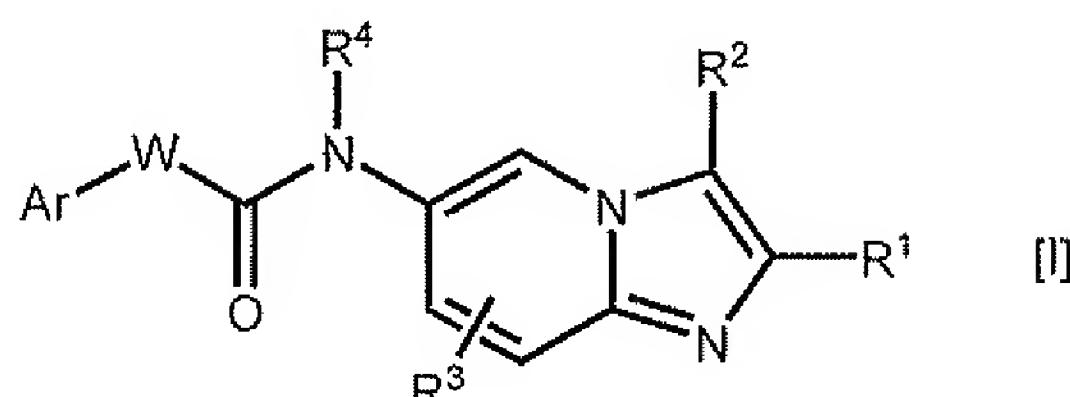


IN THE CLAIMS

Claims 1-19. (Cancelled).

20. (Currently Amended) A compound of formula [I]



wherein:

each R¹ and R² are independently selected from the group consisting of:

- (1) hydrogen
- (2) halogen
- (3) C₁₋₆ alkyl
- (4) C₃₋₈ cycloalkyl-C₀₋₄ alkyl
- (5) C₁₋₆ alkylamino
- (6) di-C₁₋₆ alkylamino
- (7) C₁₋₆ alkylcarbonylamino
- (8) C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)amino, and
- (9) 3 to 8-membered heterocycloalkyl-C₀₋₄ alkyl,

wherein the C₁₋₆ alkyl moiety may be substituted with R⁵, the cycloalkyl or heterocycloalkyl moiety may be substituted with R⁶, and R¹ and R² are not hydrogen at the same time, or

R¹ and R² together form -(CH₂)_m-, m standing for an integer of 3 ~ 6, wherein 1 or 2 hydrogen atoms constituting methylene may be substituted with R⁶;

R³ is hydrogen, halogen, C₁₋₆ alkyl or C₁₋₆ alkyloxy;

R⁴ is hydrogen or C₁₋₆ alkyl;

each R⁵ is independently selected from the group consisting of halogen, cyano, hydroxyl, amino, optionally fluorine- or hydroxyl-substituted C₁₋₆ alkyl, mono-C₁₋₆ alkylamino, di-C₁₋₆ alkylamino, optionally fluorine-substituted C₁₋₆ alkyloxy, C₁₋₆ alkyloxy-C₁₋₆ alkyl, C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyloxy- carbonylamino, C₁₋₆ alkyloxycarbonyl-(C₁₋₆ alkyl)amino, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylcarbonyloxy, C₁₋₆ alkylcarbonylamino, C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)amino, carbamoyl, mono-C₁₋₆ alkylcarbamoyl, di-C₁₋₆ alkylcarbamoyl, carbamoylamino, mono-C₁₋₆ alkylcarbamoylamino, di-C₁₋₆ alkylcarbamoylamino, mono-C₁₋₆ alkylcarbamoyl-(C₁₋₆

alkyl)amino, di-C₁₋₆ alkylcarbamoyl-(C₁₋₆ alkyl)amino, carbamoyloxy, mono-C₁₋₆ alkylcarbamoyloxy, di-C₁₋₆ alkylcarbamoyloxy, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylsulfonylamino, C₁₋₆ alkylsulfonyl-(C₁₋₆ alkyl)amino, sulfamoyl, mono-C₁₋₆ alkylsulfamoyl, di-C₁₋₆ alkylsulfamoyl, sulfamoylamino, mono-C₁₋₆ alkylsulfamoylamino, di-C₁₋₆ alkylsulfamoylamino, mono-C₁₋₆ alkylsulfamoyl-(C₁₋₆ alkyl)amino, di-C₁₋₆ alkylsulfamoyl-(C₁₋₆ alkyl)amino and pyridone;

R⁶ is R⁵ or oxo;

W is:

- (1) ~~linker (single bond) 1, 4-piperidin-di-yl,~~
- (2) mono- or bi-cyclic, 3 to 8-membered aromatic or aliphatic heterocyclic group,
- (3) mono- or bi-cyclic, 3 to 8 membered aromatic or aliphatic carbocyclic group,
- (4) C₂₋₄ alkylene in which the carbon in the main chain may be substituted with oxygen, or
- (5) C₂₋₄ alkenylene in which the carbon in the main chain may be substituted with oxygen,

wherein those substituents in above (2) through (5) may be optionally substituted with R⁵; and

Ar is an optionally R⁷-substituted aromatic carbocyclic group or aromatic heterocyclic group, said aromatic carbocyclic group or aromatic heterocyclic group selected from the group consisting of:

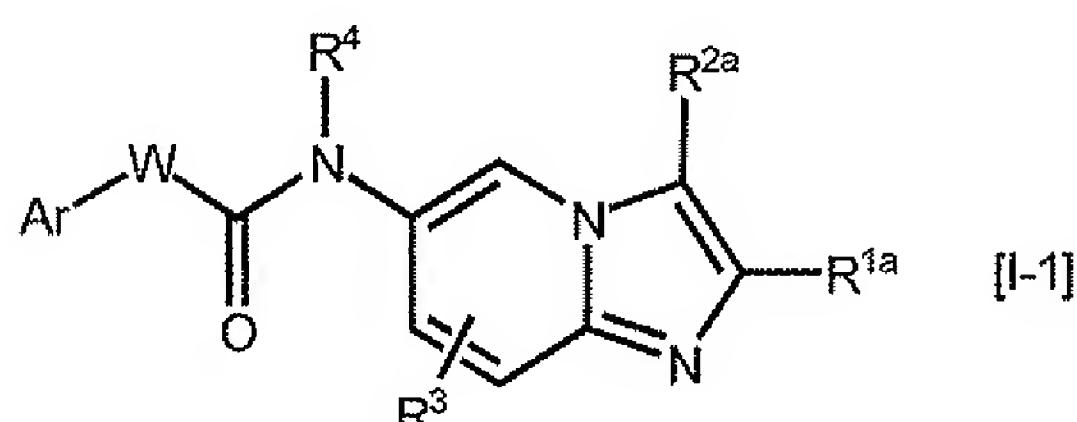
- (1) phenyl,
- (2) naphthyl,
- (3) pyridinyl,
- (4) pyrimidinyl,
- (5) pyridazinyl,
- (6) pyrazyl,
- (7) pyrazole,
- (8) pyrrolyl,
- (9) imidazolyl,
- (10) triazolyl,
- (11) oxazolyl,
- (12) isoxazolyl,
- (13) oxadiazolyl,
- (14) thiazolyl,
- (15) isothiazolyl,
- (16) thiadiazolyl, and

(17) tetrazolyl;

wherein R⁷ is selected from R⁵;

or a pharmaceutically acceptable salt thereof.

21. (Previously Presented) The compound according to Claim 20 of formula [I-1]



wherein:

R^{1a} and R^{2a} are each independently selected from the group consisting of:

- (1) hydrogen,
- (2) halogen,
- (3) C₁₋₆ alkyl,
- (4) C₃₋₈ cycloalkyl-C₀₋₄ alkyl,
- (5) C₁₋₆ alkylamino,
- (6) di-C₁₋₆ alkylamino,
- (7) C₁₋₆ alkylcarbonylamino,
- (8) C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)amino, and
- (9) 3 to 8-membered heterocycloalkyl,

wherein the C₁₋₆ alkyl moiety may be substituted with R^{5a}, the cycloalkyl or heterocycloalkyl moiety may be substituted with R⁶, and R^{1a} and R^{2a} are not hydrogen at the same time, or

R^{1a} and R^{2a} together form -(CH₂)_m-, wherein m is an integer from 3 to 6, and wherein 1 or 2 hydrogen atoms constituting methylene may be substituted with R⁶;

each R^{5a} is independently selected from the group consisting of halogen, cyano, hydroxyl, optionally fluorine- or hydroxyl-substituted C₁₋₆ alkyl, optionally fluorine-substituted C₁₋₆ alkyloxy, C₁₋₆ alkyloxy-C₁₋₆ alkyl, C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyloxy- carbonylamino, C₁₋₆ alkyloxycarbonyl-(C₁₋₆ alkyl)amino, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylcarbonyloxy, C₁₋₆ alkylcarbonylamino, C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)amino, carbamoyl, mono-C₁₋₆ alkylcarbamoyl, di-C₁₋₆ alkylcarbamoyl, carbamoylamino, mono-C₁₋₆ alkylcarbamoylamino, di-C₁₋₆ alkylcarbamoylamino, mono-C₁₋₆ alkylcarbamoyl-(C₁₋₆ alkyl)amino, di-C₁₋₆ alkylcarbamoyl-(C₁₋₆ alkyl)amino, carbamoyloxy, mono-C₁₋₆ alkylcarbamoyloxy, di-C₁₋₆ alkylcarbamoyloxy, C₁₋₆

alkylsulfonyl, C₁₋₆ alkylsulfonylamino, C₁₋₆ alkylsulfonyl-(C₁₋₆ alkyl)amino, sulfamoyl, mono-C₁₋₆ alkylsulfamoyl, di-C₁₋₆ alkylsulfamoyl, sulfamoylamino, mono-C₁₋₆ alkylsulfamoylamino, di-C₁₋₆ alkylsulfamoylamino, mono-C₁₋₆ alkylsulfamoyl-(C₁₋₆ alkyl)amino, di-C₁₋₆ alkylsulfamoyl-(C₁₋₆ alkyl)amino and pyridone, and

R³, R⁴, R⁶, W and Ar are as defined in Claim 20
or a pharmaceutically acceptable salt thereof.

22. (Previously Presented) The compound according to Claim 20, wherein R¹ is C₁₋₆ alkyl, C₁₋₆ cycloalkyl, C₁₋₆ alkylamino, di-C₁₋₆ alkylamino or C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)amino, or a pharmaceutically acceptable salt thereof.

23. (Previously Presented) A compound according to Claim 20, wherein R² is hydrogen, C₁₋₆ alkyl, C₁₋₆ cycloalkyl, C₁₋₆ alkylamino, di-C₁₋₆ alkylamino or C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)amino, or a pharmaceutically acceptable salt thereof.

24. (Previously Presented) A compound according to Claim 21, wherein R^{1a} is C₁₋₆ alkyl, C₁₋₆ cycloalkyl, C₁₋₆ alkylamino, di-C₁₋₆ alkylamino or C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)-amino, or a pharmaceutically acceptable salt thereof.

25. (Previously Presented) A compound according to Claim 21, wherein R^{2a} is hydrogen, C₁₋₆ alkyl, C₁₋₆ cycloalkyl, C₁₋₆ alkylamino, di-C₁₋₆ alkylamino or C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyl)-amino, or a pharmaceutically acceptable salt thereof.

26. (Previously Presented) A compound according to Claim 20, wherein the 3 to 8-membered heterocycloalkyl moiety is selected from the group consisting of tetrahydrofuranyl, tetrahydropyranyl, pyrrolidinyl and piperidinyl.

27. (Previously Presented) A compound according to Claim 20, wherein R³ is hydrogen, methyl or methoxy, or a pharmaceutically acceptable salt thereof.

28. (Previously Presented) A compound according to Claim 20, wherein R⁴ is hydrogen or methyl, or a pharmaceutically acceptable salt thereof.

29. (Previously Presented) A compound according to Claim 20, wherein W is selected from the group consisting of 1,2-dimethylene, 1,4-phenylene, 2-fluoro-1,4- phenylene, pyridin-2,5-di-yl, pyrimidin-2,5-di-yl, pyrazin-2,5-di-yl, 1,4-piperidin-di-yl, 1,2,4-triazol-1,3-di-yl, 1,4-cyclohexylene and oxymethylene, or a pharmaceutically acceptable salt thereof.

30. (Previously Presented) A compound according to Claim 20, in which Ar is selected from the group consisting of pyrrol-1-yl, phenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 4-chlorophenyl, 3,4-difluorophenyl, 2,4-difluorophenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4-methoxyphenyl, 4-methanesulfonylphenyl, pyridin-2-yl, 3-methylpyridin-6-yl, 2-fluoropyridin-5-yl, 3-fluoropyridin- 6-yl, 3-chloropyridin-6-yl, 2-difluoromethylpyridin-5-yl, 3-difluoromethylpyridin-6-yl, 2-methoxypyridin-5-yl, 2-methoxypyridin- 6-yl, 3-methoxypyridin-6-yl, 2-difluoromethoxypyridin-5-yl, 3-difluoromethoxypyridin-6-yl, 3-trifluoromethylpyridin-6-yl, 2-trifluoromethylpyridin-5-yl, 2-pyrimidinyl, 2-pyrazinyl and 3-pyridazinyl, or a pharmaceutically acceptable salt thereof.

31. (Previously Presented) A compound according to Claim 20, which is N-(2,3-dimethylimidazo[1,2-a]pyridin-6-yl)-4'- (trifluoromethyl)[1,1'-biphenyl]-4-carboxamide, or a pharmaceutically acceptable salt thereof.

32. (Previously Presented) A compound according to Claim 20, which is N-(2-cyclopropyl-3-methylimidazo[1,2-a]- pyridin-6-yl)-4-(2-pyridyl)benzamide, or a pharmaceutically acceptable salt thereof.

33. (Previously Presented) A compound according to Claim 20, which is N-(2-cyclopropyl-3-methylimidazo[1,2-a]pyridin- 6-yl)-4-(1H-pyrro-1-yl)benzamide, or a pharmaceutically acceptable salt thereof.

34. (Cancelled).

35. (Currently Amended) The method of inhibiting binding of melanin concentrating hormone to a melanin concentrating hormone receptor ~~treating a disease mediated by the melanin concentrating hormone receptor~~ comprising administering to a patient ~~in need of such treatment~~ a therapeutically effective amount of a melanin concentrating hormone receptor antagonist compound according to Claim 20, or a pharmaceutically acceptable salt thereof.

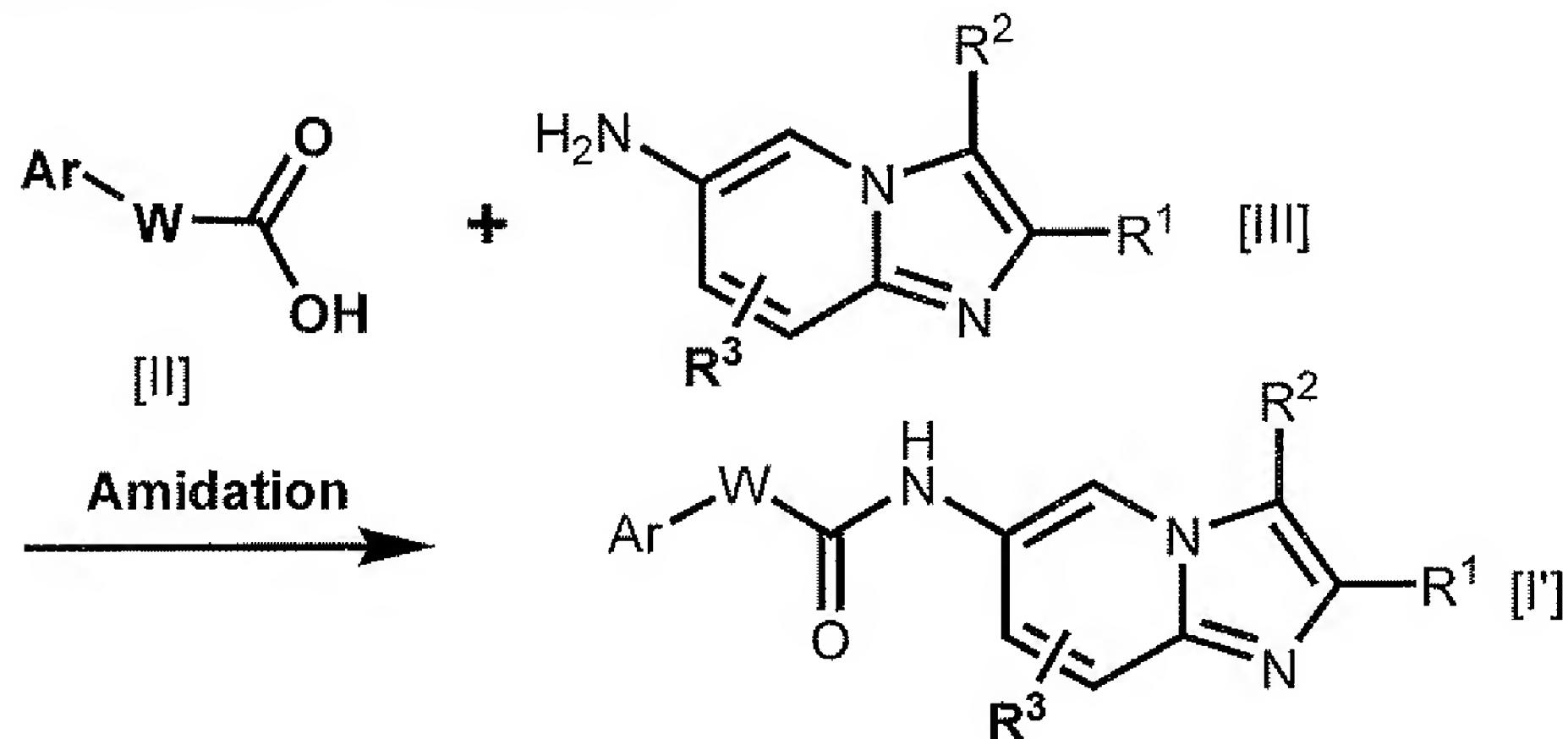
36. (Previously Presented) The pharmaceutical composition comprising a compound according to Claim 20, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

37. (Cancelled).

38. (Currently Amended) The method of preventing or treating obesity in a patient in need thereof comprising administering to said patient a therapeutically or prophylactically effective amount of a compound according to Claim 20, or a pharmaceutically acceptable salt thereof.

39. (New) A method for producing a compound according to Claim 20 of formula [I] which comprises the steps of:

(1) amidating a compound represented by a general formula [III], wherein Ar and W are as defined in Claim 20, with a compound represented by a general formula [III] wherein R¹, R² and R³ are as defined in Claim 20; and



(2) optionally condensing, where R⁴ is not hydrogen, the compound as obtained in the above step with a compound represented by a general formula [IV], wherein X₁ is a leaving group and R⁴ is defined in Claim 20:

